UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,218	11/20/2003	Richard D. Dettinger	ROC920030251US1	9017

46797   7590   12/27/2007
IBM CORPORATION, INTELLECTUAL PROPERTY LAW
DEPT 917, BLDG. 006-1
3605 HIGHWAY 52 NORTH
ROCHESTER, MN 55901-7829

EXAMINER
PHAM, KHANH B

ART UNIT	PAPER NUMBER
2166	

MAIL DATE	DELIVERY MODE
12/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

MAILED

DEC 27 2007

Technology Center 2100

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 10/718,218
Filing Date: November 20, 2003
Appellant(s): DETTINGER ET AL.

Gero G. McClellan
<u>For Appellant</u>

EXAMINER'S ANSWER

This is in response to the appeal brief filed September 20, 2007 appealing from the Office action mailed March 20, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| US 2004/0034521 A1 | KAWAKURA et al. | 2-2004 |
| US 2004/0046789 | INANORIA | 3-2004 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1, 3-4, 6-8, 10-19, 20-23, 25-27 and 29-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawakura et al. (US 2004/0034521 A1), hereinafter "**Kawakura**".

As per claim 1, Kawakura teaches a method of providing natural language support for users running queries against a database comprising:

- "providing a data abstract model comprising a plurality of logical fields abstractly describing physical data residing in the database" at [0122] and Figs. 7-18;

- "associating the data abstraction model with a language resource component defining a natural language expression for each of the plurality of logical fields" at [0130] - [0133] and Figs. 6-18;

- "creating an effective data abstraction model by modifying the data abstraction model in accordance with a view that reflects one or more security setting for a group of users" at [0179]-[0181] ;

- "displaying to a user of the group of users, the effective data abstraction model" at [0148]-[0149].

As per claim 3, Kawakura teaches the method of claim 1, further comprising: "creating the language resource component for the data abstraction model, the creating comprising mapping a default value to each logical field of the plurality of logical fields" at [0130]-[0133] and Figs. 7-16.

As per claim 4, Kawakura teaches the method of claim 1, wherein "the associating comprises: generating, in the data abstraction model, a reference to the language resource component to associate the data abstraction model with the language resource component" at Fig. 7.

As per claim 6, Kawakura teaches a method of providing natural language support for users running queries against a database comprising:

- "providing a data abstraction model comprising a plurality of logical fields abstractly describing physical data residing in the database" at [0122];

- "providing translation information for the data abstraction model describing translations of each of the plurality of logical fields from a first natural language expression to two or more second natural language expressions" at [0130]-[0133];

- "displaying one of the second natural language expression to a user, wherein which of the two or more second natural language expressions is displayed depends upon which natural language expression files are loaded to define a language resource component associated with the data abstract model" at [0143], [0148]-[0149] and Fig. 7-18.

As per claim 7, Kawakura teaches the method of claim 6, wherein "the first and second natural language expressions are two different languages" at [0147].

As per claim 8, Kawakura teaches the method of claim 6, wherein "the first and second natural language expressions are two different variations on the same language" at [0183].

As per claim 10, Kawakura teaches the method of claim 6, wherein "the data abstraction model further comprise a reference to at least a portion of the translation information" at [0181].

As per claim 11, Kawakura teaches the method of claim 10, wherein "the referenced portion is a default file" at [0182].

As per claim 12, Kawakura teaches the method of claim 6, wherein "providing translation information comprises successively loading language resource files, wherein each successive language resource file comprises translations of increasing specificity to replace relatively less specific translations of one or more previously loaded language resource files" at [0209]-[0212].

As per claim 13, Kawakura teaches the method of claim 6, wherein "the translation information further describes translations of each of the plurality of logical fields from the first natural language expression to a third natural language expression, and further comprising: displaying, to a user, at least a portion of the data abstraction model, using only one of the first natural language expression, one of the two or more second natural language expression and the third natural language expression" at [0147]-[0148] and Figs. 7-13.

As per claim 14, Kawakura teaches the method of claim 13, wherein "which language expression is used to display the portion of the data abstraction model is based on user parameters" at [0179].

As per claim 15, Kawakura teaches the method of claim 14, wherein "the user parameters describe a context of the user" at [0179].

As per claim 16, Kawakura teaches the method of claim 6, further comprising:

- "retrieving an abstract query expressed in the first natural language expression" at [0125]-[0126];

- "translating the abstract query on the basis of the translation information to express the abstract query in the second natural language expression" at [0129]-[0130];

- "displaying the abstract query expressed in the second natural language expression" at Figs. 7-16.

As per claim 17, Kawakura teaches a method of providing natural language support for users running queries against a database comprising:

- "retrieving an abstract query comprising a plurality of logical fields, each corresponding to a logical field specification of a data abstraction model abstractly describing physical data residing in the database" at Fig. 7;

- "determining from the data abstraction model, an associated language resource component" at Fig. 7;

- "determining, from the associated language resource component, at least two natural language expressions for the plurality of logical fields of the abstract query" at Fig. 8;

- "displaying the abstract query in one of the at least two determined natural language expression to a user" at Fig. 9;

- "wherein the natural language expression displayed is determined by a security setting of the user" at [0179].

As per claim 18, Kawakura teaches the method of claim 17, further comprising: "prior to displaying, translating the abstract query from another language expression in which the abstract query initially written" at [0130]-[0131].

As per claim 19, Kawakura teaches the method of claim 17, wherein "the associated language resource component is a language resource file, the data abstraction model including a reference to the language resource file" at Figs. 7-9.

Claims 20-23, 25-27 and 29-41 recite a computer readable medium and computer system for performing similar method as in claims 1, 2-4, 6-8, 10-19 discussed above and are therefore rejected by the same reasons.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 5, 9, 24, 28** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kawakura as applied to claims above, and in view of Inanoria (US 2004/0046789

A1), hereinafter "Inanoria".

5.   **As per claims 5, 9, 24 and 28,** Kawakura teaches the same as discussed in the

rejection of claims 4, 6, 23 and 25 above. Kawakura does not explicitly teach the

associated language resource is an "XML Localization Interchange File Format". ·

However, Inanoria teaches the advantage of XML Localization Interchange File Format

to facilitate "the ease of use and management for multi-lingual characters specially

double-byte characters for Asian languages..." at [0164]Thus, it would have been

obvious to one of ordinary skill in the art at the time of the invention was made to

combine Kawakura and Inanoria's teaching in order to "facilitate the ease of use and

management for multi-lingual characters" such as Japanese and Chinese as disclosed

in Kawakura and Inanoria.

(10) Response to Argument

1. Claims 1, 3-4, 6-8, 10-19, 20-23, 25-27, and 29-41 are anticipated by Kawakura under 35 U.S.C §102(e).

Claim 1 is illustrated of the invention and reads as follows:

1. A method of providing natural language support for users running queries against a database, comprising:

providing a data abstraction model comprising a plurality of logical fields abstractly describing physical data residing in the database;
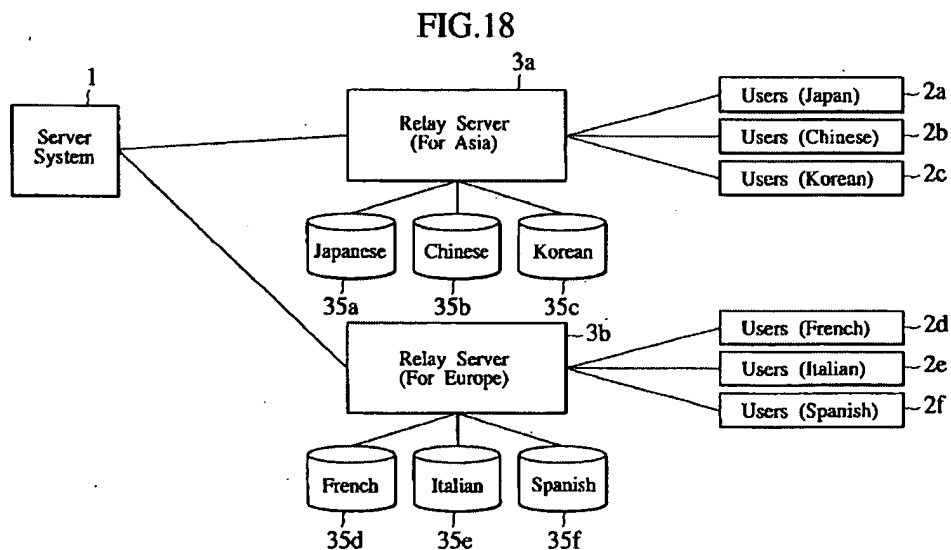
associating the data abstraction model with a language resource component defining a natural language expression for each of the plurality of logical fields;

creating an effective data abstraction model by modifying the data abstraction model in accordance with a view that reflects one or more security settings for a group of users; and

displaying, to a user of the group of users, the effective data abstraction model.

Appellant's claimed invention is directed to method for providing/creating an effective multilingual database by associating a "language resource component" with the database, wherein the "language resource component" provides translation of each of logical fields of the database from a first language to a second language, for example, from English to Russian (Appellant Specification paragraph [0027], [0005]) . The effective database allows different groups of users to view/query in different languages most appropriate for their need ([0064]-[0067]). For example, English's user group can view/query the database in English, while Russian's user group can view/query the database in Russian language.

Kawakura teaches at [0122] a database abstract model comprises a plurality of

logical fields such as "hotel names, guest's names, accommodation dates..." While all

the information is managed in English, the database system also supports other

languages by associating the database with "replacement data obtained by translating

language-dependent data into data in another languages" (mapped to the claimed

"language resource component", See [0130]-[0133]). During user authentication (i.e.

"security setting", see ([0179]-[0181]), the user designates a language for use in this

section, the language designation (i.e. "language code") is associated with a request for

user authentication and the relay server 3 extracts language-dependent data from the

request data based on the language code and "makes uses of the language information

to handle requests from the same user until log-out". An embodiment of Kawakura's

system is shown at Fig. 18, wherein different groups of users 2a-2f can view the

database resides on the server 1 in different languages by utilizing language

components 35a-35f :

FIG.18

Regarding claims 1, 20, 25, 39, and 40, appellant argued that Kawakura does not teach creating an effective data abstraction model by modifying the data abstraction model **in accordance** with a view that reflects one or more security settings for a group of users". Appellant further explained that "creating an effective data abstract model based on a view allows different groups of users to view different translations (most appropriate for their need). On the contrary, Kawakura teaches at [0079]-[0081] the step of creating a database in a specific language to handle user's request in accordance with security setting for a group of users. Kawakura teaches at [0177] that before accessing data from the database in a designated language, user is required to input his ID/password and designates a language for use in this session (i.e. "security setting"). The system will determine whether the user belong to group of authorized users and creates a database in the designated language. Kawakura's system therefore allows different groups of users to view different translations which most appropriate for their need. Users of a particular language groups (Fig 18, 2a-af) with proper authorization are allowed to view the database in their designated languages, while unauthorized users are not.

Appellant further argued that Kawakura "does not teach creating any type of data model by **modifying** another data model". On the contrary, Kawakura teaches at [0148] the step of **translating** logical fields of the data model to another language to create a new data model in different language. Particularly, Kawakura teaches:

[0148]... In this case, the language information, **the hotel names and the event names are data items to be translated in the other language**. Next, these data items to be translated in the other language are **replaced by the replacement data d7** as received from the data processing section 34 to generate data d9. In accordance with the data list d8, the process as designated of the language designation information (Language=ja) is "addition" so that language information is added to the original response data d2. The process as designated of other items, i.e., the hotel names and the event names is **"replacement by multilingual data"** so that the original **English response data d2'**, i.e., **"HOTEL Tokyo" and "Valentine Fair" is replaced by corresponding Japanese data**. In this case, there is no corresponding Japanese data to the event "Winter Plan" so that the English data is used as it is. Next, **the data d9 is created from data d9'** in order to conform with the interface of the client system 2 and transferred to the client data transmitting section 38.

Regarding claims 6, 17, 36, and 41, appellant argued that Kawakura fails to teach "providing translation information for the data abstract model describing translations of each of the plurality of logical fields from a first natural language expression to two or more second natural language expressions" and "displaying one of the second natural language expressions to a user, wherein which of the two or more second natural language expression is display depends upon which natural language expression are loaded to define a language resource component associated with the data abstraction model". On the contrary, Kawakura teaches the step of displaying translated language expressions to the user at [0148] where "the hotel names and the event names is "replacement by multilingual data" so that the original English response data d2', i.e., "HOTEL Tokyo" and "Valentine Fair" **is replaced by corresponding Japanese data**". Kawakura also teaches at Fig. 18 above a plurality of language

components 35a-f for translating the database's logical fields and the translation

displayed is dependent on which language files 35a - 35f are loaded (i.e. the language

resource file is designated by users 2a-f as discussed above). For example, Kawakura

teaches at [0147] the language code "ja" is used to extract Japanese replacement data

and language code "zh" is designated in a request is used to obtain Chinese

replacement data. Kawakura's Fig. 9 shown an exemplary where language code "ja" is

used and Japanese language component is loaded to translate logical fields from

English to Japanese:

FIG.9
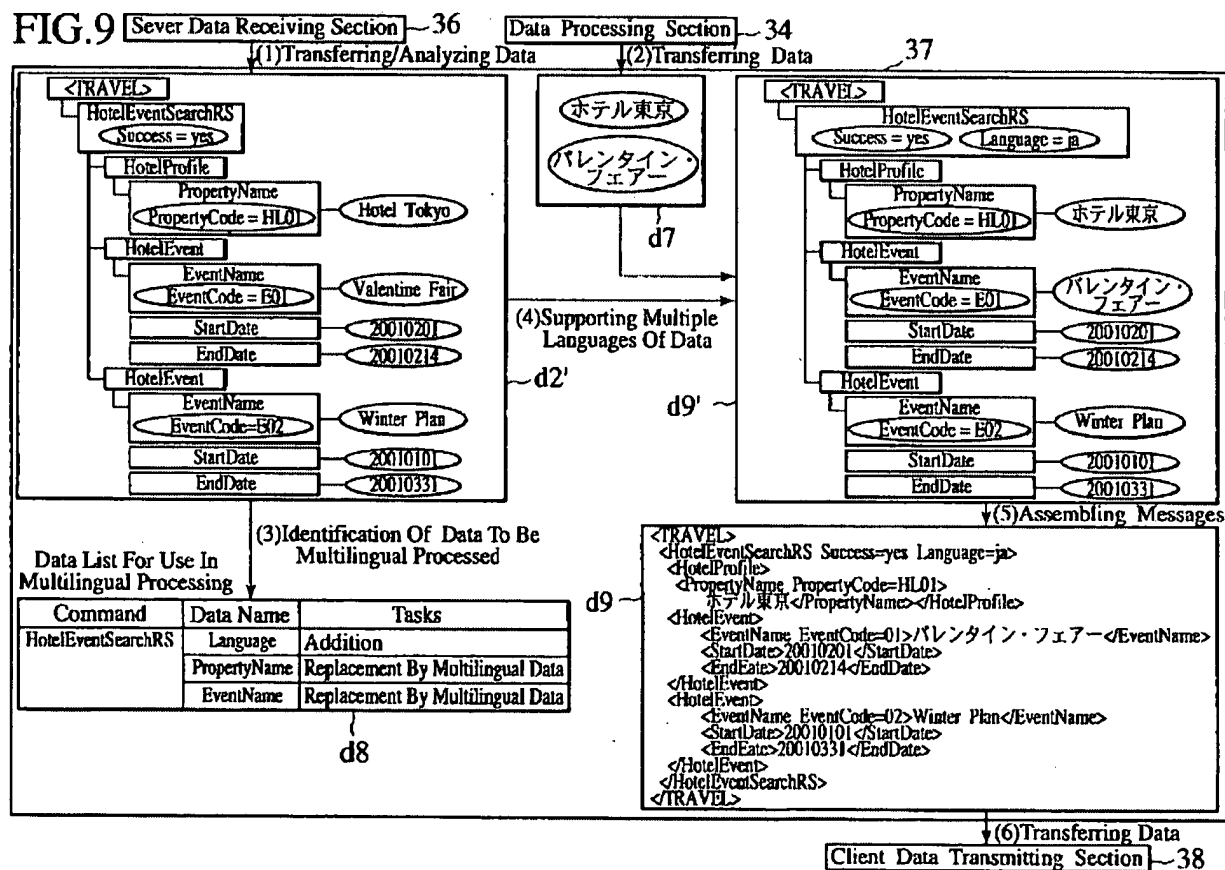
For the above reasons, it is believed that the 102 rejection based upon Kawakura

should be sustained.

2. Claims 5, 9, 24 and 28 are not unpatentable over Kawakura, and in view of Inanoria under 35 U.S.C §103(a).

In view of the discussion above, Kawakura and Inanoria, as combined, teaches each and every claimed limitations. The 103 rejection based upon Kawakura and Inanoria are therefore proper and should be sustained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,
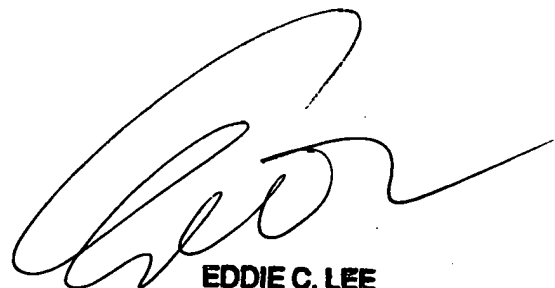
Khanh B. Pham

Primary Examiner

Conferees:

Hosain Alam

Supervisory Patent Examiner

EDDIE C. LEE
SUPERVISORY PATENT EXAMINER

Eddie Lee

Supervisory Patent Examiner